

ABSTRACT

ART 34 AMDT

5 A wet and a wet and dry dust removal apparatus, the latter for drilling applications
including a housing, adapted to contain powered air induction means to induct air
contaminated with particulate matter, water spraying means adapted to spray a mist of
water into the induced air stream to capture the particulate matter, water removal means
adapted to remove water droplets containing the particulate matter, the water removal
means positioned in the housing parallel angle to the direction of the air flow, wherein the
10 paralleled position by presenting a minimal drag profile in the air flow reduces the air
pressure and velocity required to remove dust for a given volume of air, so that the energy
consumption of the air induction means is correspondingly reduced.